

## REMARKS

Claims 1 – 13 are currently pending in the application. In the present Response, Applicant amends claims 1, 5 and 13. No new matter is added.

### REJECTIONS UNDER 35 U.S.C. §§ 102, 103

Claims 1-6, 8-11 and 13 are rejected under 35 U.S.C. §102 as being anticipated by Marshall et al. (U.S. Patent No. 5,215,464). Claims 7 and 12 are rejected under 35 U.S.C. § 103 as being unpatentable over Marshall in view of Eichweber (U.S. Patent No. 4,695,256).

Applicant respectfully traverses these rejections.

In independent claims 1, 5, and 9 - 13, Applicant discloses a laser transmitting/receiving system for target practice that includes a laser transmitter and a laser receiver. The laser transmitter includes a modulator for modulating a laser signal with position information of the transmitter which is provided to the modulator via a controller for transmitting position information. The laser receiver includes an information extractor for extracting position information from a received laser signal, and a judgment unit for judging a shot effect based on the extracted position information. For example, as claimed in Applicant's claim 11, the judgment unit may judge a shot effect in accordance with a distance obtained from position information extracted from the received laser signal and position information of the laser receiver.

Marshall discloses a shoot-back simulation training device that simulates the effect of returned aggression in a shooting combat scenario (see, e.g. abstract of Marshall). The device of Marshall includes an infrared source 16 in a weapon that is engaged upon "firing" of the weapon to cause a collimated beam 18 to impinge on a projection screen 12 (see, e.g., FIG. 2 of Marshall). A video projector 14 projects a combat image of the projection screen 12. The entire

image is captured by a spot tracker 24, which determines a coordinate position of the collimated beam 18 in relation to the entire image on the projection screen 12 (see, e.g., column 3, lines 48 – 62 of Marshall).

Unlike Applicant's claimed invention, Marshall fails to disclose a laser transmitting/receiving system in which a modulator on the transmitting side modulates a transmitting laser signal by position information of the transmitting side (see, e.g., Applicant's claims 1, 5, 9 and 13), and a judgment unit on the receiving side extracts position information from the received laser signal transmitted by the transmitting side (see, e.g., Applicant's claims 10 – 12).

According to Marshall, and in sharp contrast to Applicant's claimed invention, spot tracker 24 does not extract position information from a received signal, but rather senses an X-Y coordinate position of an infrared beam received on a projection screen of the receiver (see, e.g., column 3, lines 48 – 62 of Marshall). Further, unlike Applicant's claimed invention, the sensed coordinate position of the infrared beam does not provide position information of the laser transmitter side (see, e.g., Applicant's claims 1, 5, 9 and 13). Rather, the position information sensed by spot tracker 24 of Marshall is position information indicating a position the beam transmitted by the transmitting side on the projection screen 12. Such position information is clearly not determinative of the position of the laser transmitter side.

Marshall also fails to disclose Applicant's claimed modulator for modulating the transmitting signal by position information (see, e.g., Applicant's claims 1, 5, 9 and 13). While Marshall does teach modulation of an infrared signal, the modulation scheme taught is modulation of an infrared emitting diode (IRED) by a fixed, 1.6 KHz square wave (see, e.g., column 8, lines 26 – 31 of Marshall). Clearly, in contrast to Applicant's claimed invention, the fixed square wave taught by Marshall for modulating the IRED signal fails to be capable of

providing position information of the laser transmitter side, as this position information will be variable.

Eichweber discloses a firing simulator capable of determining a “hit position” of a simulated firearm (see, e.g., column 1, lines 9 – 15 of Eichweber). Like Marshall, Eichweber fails to disclose or otherwise suggest the above-discussed transmitting signal modulating and extracting features of Applicant’s claimed invention.

Accordingly, Applicants respectfully submit that independent claims 1, 5 and 9 - 13 are neither anticipated by Marshall or made obvious by the combination of Marshall and Eichweber, and therefore stand in condition for allowance. As dependent claims 2- 4 and 6 – 8 respectively depend from allowable claims 1 and 5, Applicant further submits that dependent claims 2 – 4 and 6 -8 are allowable for at least this reason.

In a Response mailed on July 15, 2004, Applicant’s representative argued that Applicant’s claimed invention could be distinguished over the device of Marshall as employing a modulator coupled with a laser transmitter that “operates to encode position information for the transmitter within transmitted laser signal.” Applicant’s invention as claimed does not require that position information be encoded for modulating the transmitting laser signal. Rather, all that is claimed is that the transmitting signal be modulated by position information. Accordingly, Applicant respectfully withdraws the arguments of the Response of July 15 to the extent that these arguments suggest that the position information modulating the laser signal must be encoded.

## CONCLUSION

An earnest effort has been made to be fully responsive to the Examiner’s objections. It is believed that claims 1 – 13, consisting of independent claims 1, 5 and 9 – 13, and the claims

dependent therefrom, are in condition for allowance. Passage of this case to allowance is earnestly solicited. However, if for any reason the Examiner should consider this application not to be in condition for allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged on Deposit Account 50-1290.

Respectfully submitted,

  
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